

# DESCRIPTIONS OF THE NEOTYPE OF *DRAECULACEPHALA* *MOLLIPES* (SAY) AND A NEW SPECIES PREVIOUSLY CONFUSED WITH IT

(HOMOPTERA, CICADELLIDAE)

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For many years the green and yellow sharp-headed leafhopper, *Draeculacephala mollipes* (Say), has been recognized as one of our common and abundant grass-feeding species in pastures, meadows and on certain of the cultivated grass crops. Recent studies of the genital structures of the males of this group have shown that a second common species described and illustrated herewith as *constricta* has been confused with *mollipes* because of their superficial resemblance. In view of the fact that the type specimens of *mollipes* have been destroyed, it has been necessary to designate which of these species should bear the name *mollipes*. The original description of *mollipes* would fit either species so we have agreed on the designation of the specimens described and illustrated at this time as *mollipes* (Say). We arrived at this decision after careful study of the male genital characters of large series of specimens previously identified as this species. A neotype is, therefore, being erected to serve as a future type for the species. A taxonomic revision of the entire genus has been completed and has been submitted for publication.

## *Draeculacephala mollipes* (Say)

*Tettigonia mollipes* Say, Jour. Acad. Nat. Sci. of Phila. 6 : 312, 1831.

A yellow and green species with acutely angled vertex and without distinct markings. Length male 6 mm., female 7.5-8 mm.

Vertex produced, apex blunt, as long as or slightly longer than basal width and slightly longer than pronotum.

Color: Vertex, anterior portion of pronotum and scutellum yellow, posterior portion of pronotum and elytra dark green. Vertex faintly marked with narrow brownish lines.

Genitalia: Female last ventral segment with posterior margin concavely roundedly produced either side of a median produced rounded apex. Male plates long, concavely tapered to narrow, rounded divergent apices. Styles short, rather broad at middle, apical portion bent inwardly, and outer margin concavely rounded to pointed apex. The ventro-anterior portion of aedeagus with a pair of rather short, thick, dorsally directed processes and a pair of long, spine-like ventral processes which diverge and extend caudally to tip of aedeagus with their apices curved dorsally. Dorso-posterior portion with a pair of dorsally directed divergent processes and a ventral process which in ventral view appears elongate, about one-third as wide as long with narrow base and narrow bluntly pointed apex.

A male specimen from Hocking County, Ohio, collected August 25, 1935, by Dr. J. S. Caldwell, is designated as the neotype and a female from the same locality as the neallotype. Male and female specimens in the series are designated paratypes. All types deposited in the authors' collections.

Data from labelled specimens authentically identified as this species indicates the following distribution by states: Maine, New York, Pennsylvania, Ohio, Indiana, Illinois, Tennessee, Missouri, Wisconsin, Minnesota and Ontario, Canada.

## *Draeculacephala constricta* n. sp.

Resembling *mollipes* in size, form and color but with distinct male genitalia. Length male 6.5 mm., female 8 mm.

Vertex produced and bluntly angled, in both sexes as long as basal width and slightly shorter than pronotum.

Color: Vertex, anterior portion of pronotum and scutellum yellow, vertex marked with faint brownish longitudinal lines. Posterior portion of pronotum and elytra dark green, veins paler.

Genitalia: Female last ventral segment produced from lateral angles, concave either side of median produced apex which is bluntly pointed. Male plates long, reaching to tips of pygofers, concavely narrowed to acute rounded apices. Styles short, broad at middle, apical portion bent inwardly, narrowed to pointed apices. Ventro-anterior portion of aedeagus with a pair of dorsally directed basal processes and a ventral pair of posteriorly directed divergent spine-like structures which extend almost to end of aedeagus and have apices which bend upward. Dorso-posterior portion with a pair of dorsally directed processes and a ventral portion which is elongate, narrowed at base, convexly rounded to almost one-half its width and with apex broadly rounded. In lateral view it is decidedly constricted just before base.

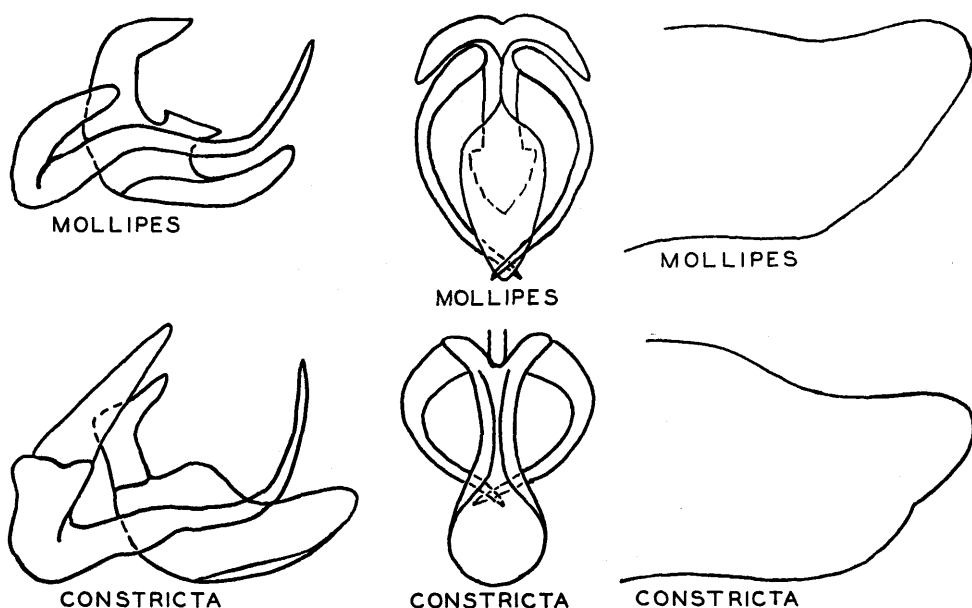


FIG. 1. Lateral and ventral views of the aedeagi, and lateral views of the pygofers.

Holotype male, allotype female and male and female paratypes from Washington County, Ohio, Oct. 12, 1940, collected by the senior author and deposited in the authors' collections. Male and female paratypes from Vandalia, Ohio, June 10, 1934 (Davidson); Northeast, Penn., June 15, 1917 (DeLong) in the Ohio State University collection. A large series of male and female paratypes collected at a light in Athens, Ohio, June 2, 1934 (W. C. Stehr) and deposited in the University of Minnesota collection. A large series of male and female paratypes deposited in the Illinois Natural History Survey collection are from the following localities in Illinois: St. Joseph, Fulton, Pike, Alton, Springfield, Princeton, Oquawka, Loda, Monmouth, Danville, Shawneetown, Havana, Pulaski, Apple River Canyon, Macomb, Anna, Oakwood, Urbana, Castle Rock, Beach, Evergreen Park, Dixon, Savannah, Wauconda, Hanover, Algonquin, Decatur, Thomson, Champaign, Zion, St. Anne, Dubois, Oak Lawn, Seymour, Kankakee, Dixon Springs, Parker, Warren, Weldon Springs, Dongola, Marshall, McHenry, Carbondale, Mt. Carmel, Metropolis, Grafton, Barry, Amboy, Vienna, Orangeville, Sheffield and Putnam.

Other areas from which this species has been taken are Maine, New York, New Jersey, Virginia, West Virginia, Kentucky, Tennessee, Indiana, Michigan, Wisconsin, Iowa, Missouri, Oklahoma, Texas, Florida, Kansas, Nebraska, South Dakota, Minnesota, Montreal, Quebec; and Banff, Alberta, Canada.